The Year 2003 Weather In Review for Central Kentucky and South Central Indiana

January 2004

The year 2003 brought a variety of weather to central Kentucky and south-central Indiana. Below is a summary of precipitation, snowfall totals, and extreme temperatures in 2003 at Louisville (National Weather Service office), Lexington, and Bowling Green.

	Louisville	Lexington	Bowling Green
Total Precipitation (inches): Normal Precipitation: Departure from Normal:	53.82	53.41	53.68
	44.54	45.91	51.63
	+9.28	+7.50	+2.05
Total Snowfall (inches):	20.3	18.5	8.6
Normal Snowfall: Departure from Normal:	16.4	16.0	5.0
	+3.9	+2.5	+3.6

The year 2003 was the fourth year in a row with above normal precipitation for Louisville, and the second wet year in a row for Lexington and Bowling Green. The year 2002, with 56.6 inches of total precipitation, was the fifth wettest year in Louisville since 1872. For Louisville, these past two years were the first consecutive years with precipitation totals over 50 inches since 1989 and 1990.

	Louisville	Lexington	Bowling Green
Highest Temperature:	93 (Aug 24)	93 (Jul 8)	94 (Aug 22)
Lowest Temperature:	1 (Jan 27)	-7 (Jan 27)	-2 (Jan 24)
Greatest 24-hr Rainfall:	2.31 (May 4-5)	2.09 (Nov 11-12)	3.48 (Sep 21-22)

Winter season...January and February:

The year 2003 started off cold and snowy. Both January and February endured well below normal temperatures and above average snowfall. These two months, coupled with a colder than normal December in 2002, gave Louisville and the rest of northern Kentucky its coldest winter since 1979. The most memorable winter storm of 2003 struck east central Kentucky, including Frankfort and Lexington, on February 15-16. Ice accumulations of up to one inch damaged a large multitude of trees and cut power to 125,000 people. Damage from the ice storm was estimated at over 25 million dollars. This same storm brought around an inch of sleet to Louisville, and up to 4 inches of snow across south-central Indiana. Although snowfall amounts were above normal for these two months, no really heavy snowstorms affected southern Indiana and central Kentucky. Instead, numerous smaller storms each brought lesser amounts.

Monthly Average Temperature (Temperature Compared to Normal) (degrees)

Location	<u>January</u>	<u>February</u>
Louisville	27.2 (-5.3)	31.4 (-6.2)
Lexington	26.1 (-5.9)	31.9 (-4.5)
Bowling Green	31.0 (-3.2)	35.8 (-2.8)

Total Precipitation (Precipitation Compared to Normal) (inches) Total Snowfall (inches)

Location	<u>January</u>	<u>February</u>	<u>Location</u>	<u>January</u>	<u>February</u>
Louisville	1.57 (-1.71)	5.28 (+2.03)	Louisville	5.3	10.7
Lexington	0.95 (-2.39)	4.85 (+1.58)	Lexington	6.3	8.3
Bowling Green	1.36 (-2.79)	5.92 (+1.77)	Bowling Green	3.4	4.6

Spring season...March, April, and May:

After the cold winter, spring provided a welcome relief. Average temperatures rose to near normal for this three month period. Rainfall amounts generally were above normal, with a wet April and May.

Spring is severe weather season, and 2003 was no exception. On April 20, Louisville International Airport measured a wind gust of 67 mph during a severe thunderstorm. The season's first significant tornado was rated an F-1. Touching down in southern Perry County, Indiana southwest of Rome, this twister uprooted quite a few trees in the Hoosier National Forest and significantly damaged one home.

By far the most significant event last spring occurred during the early morning hours of May 11 (Mother's Day). Several damaging tornadoes touched down across central Kentucky. In Hardin County, an F2 tornado struck Rineyville, damaging or destroying 40 homes. A brief F0-F1 tornado moved through downtown Munfordville in Hart County, damaging the courthouse and other buildings along a 3 block area. The costliest tornado of the spring struck just north of Harrodsburg in Mercer County. This tornado, rated an F2, caused 15 million dollars of damage, destroyed 12 homes, and killed one person.

Monthly Average Temperature (Temperature Compared to Normal) (degrees)

<u>Location</u>	<u>March</u>	<u>April</u>	<u>May</u>
Louisville	47.7 (+0.8)	57.8 (+1.4)	64.5 (-1.3)
Lexington Bowling Green	47.7 (+2.1) 50.3 (+2.5)	57.2 (+2.6) 60.5 (+3.7)	63.6 (-0.2) 65.4 (-0.4)

Total Precipitation (Precipitation Compared to Normal) (inches)

<u>Location</u>	<u>March</u>	<u>April</u>	<u>May</u>
Louisville Lexington	2.25 (-2.16) 2.44 (-1.97)	6.06 (+2.15) 4.10 (+0.43)	7.66 (+2.78) 8.35 (+3.57)
Bowling Green	1.64 (-3.33)	5.68 (+1.69)	5.01 (-0.35)

Summer season....June, July, and August:

This past summer provided a tremendous contrast to the hot, dry summer of 2002. These three months averaged out to be one of the coolest summers in recent years. In fact, Louisville had its second coolest summer since 1982, as only 1997 proved cooler. In addition, Summer 2003 will be noted for its timeliness and frequency of precipitation. The region did not experience any lengthy multi-week dry periods, which can occur each summer.

Early summer was quite cool. In fact, temperatures in Lexington and Louisville remained below normal until June 12, completing a stretch of 23 straight below normal days extending from May. Bowling Green had a stretch of 22 straight days of below normal temperatures during this same period. The summer's most widespread severe weather outbreak occurred on August 2 when several lines of thunderstorms brought high winds to north-central Kentucky. Winds blew down many trees and left 13,000 customers without power in Jefferson County.

The most damaging single storm of the summer season sunk several boats and damaged covered boat docks at Barren River State Resort Park. A downburst estimated at 70 mph from a late evening thunderstorm pushed the docks towards shore, crumpling floating walkways and snapping anchor cables. Elsewhere in the park, winds damaged the main hotel and toppled 500 trees. An estimated 1.5 million dollars of damage was reported.

Monthly Average Temperature (Temperature Compared to Normal) (degrees)

<u>Location</u>	<u>June</u>	<u>July</u>	<u>August</u>
Louisville	69.8 (-4.4)	76.0 (-2.4)	76.4 (-0.6)
Lexington	69.0 (-3.2)	75.1 (-1.0)	75.7 (+0.9)
Bowling Green	70.1 (-1.8)	76.7 (-1.8)	77.3 (+0.5)

Total Precipitation (Precipitation Compared to Normal) (inches)

<u>Location</u>	<u>June</u>	<u>July</u>	<u>August</u>
Louisville Lexington	3.60 (-0.16) 6.43 (+1.85)	4.33 (+0.03) 5.10 (+0.29)	4.70 (+1.29) 4.51 (+0.74)
Bowling Green	8.92 (+4.63)	4.43 (-0.11)	3.41 (+0.05)

Fall season....September, October, November, and December:

For many people, fall is the most pleasant season of the year across the Ohio Valley. This year's fall proved their point. September through November brought quite a number of sunny, mild days, while almost no severe weather occurred during this stretch. One of the few extended wet periods was noted during the first 3 days of September when a stalled cold front, coupled with moisture from a dissipated tropical depression, brought 2 to 4 inches of rain across northern Kentucky and southern Indiana. A remarkable stretch of warm weather occurred from October 30 through November 5, when daily temperatures averaged 11 to 17 degrees above normal across all of southern Indiana and central Kentucky. This included a warm Halloween when highs reached 78 in Bowling Green, 77 in Louisville, and 75 in Lexington. In addition, record high temperatures of 82 and 80 were set in Louisville on November 3 and 4, respectively.

Monthly Average Temperature (Temperature Compared to Normal) (degrees)

<u>Location</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
Louisville	66.3 (-3.8)	57.8 (-0.7)	50.7 (+3.1)	37.0 (-0.6)
Lexington	65.1 (-2.9)	56.2 (-0.3)	49.5 (+3.5)	35.5 (-0.8)
Bowling Green	66.9 (-2.7)	58.3 (+0.4)	51.5 (+4.0)	38.3 (0.0)

Total Precipitation (Precipitation Compared to Normal) (inches)

<u>Location</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
Louisville Lexington	6.63 (+3.58) 5.07 (+1.96)	2.24 (-0.55) 1.75 (-0.95)	5.69 (+1.88) 5.93 (+2.49)	3.80 (+0.11) 3.93 (-0.10)
Bowling Green	6.88 (+2.75)	1.31 (-1.86)	5.17 (+0.71)	3.95 (-1.11)